

Features:

- 12V, 24Vdc input power (nominal)
- Optional accessory input switch connection
- 6 ports – Ethernet (10/100 Mbps) for multiple Ethernet devices on a machine
- 2 power outputs (feed-through) to power external devices, and 4 of 48V 0.35A outputs
- LED indicators
- Surge, Reverse polarity, input overvoltage, input undervoltage, and output overcurrent protection
- IP66
- Suitable for high vibration and shock environments



Applications:

- Off-highway equipment, mining equipment

Description: The Ethernet Switch operates as an unmanaged switch that is capable of handling communication of 6 different Ethernet capable devices. The device can be utilized to reduce machine cabling. Each port can communicate up to 100mbps and has LED indicators showing the status of the ports. This module can be powered through either the power input connector, or through port 1. It can also power two external devices through ports 2 and 3, connecting them to the input power. Each of these two ports has over current protection that triggers at 1A. An output of 48V 0.35A is available at ports 1, 4, 5, and 6.

Ordering Part Numbers: 6 port Ethernet Switch: AX141400

Technical Specifications:

Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on <https://www.axiomatic.com/service/>.

Input Specifications

Power Supply Input - Nominal	12V, 24Vdc nominal (9...36VDC power supply range)
Protections	Surge and reverse polarity protection are provided. Input overvoltage, input undervoltage and output overcurrent protection are provided.
Accessory Switch Input	Provided 0-36Vdc Switch enabled > 2.0 Vdc Switch disabled < 0.8 Vdc The input accessory switch can shut down the device and Port and 3 power sourcing. If power is applied through port 1, the input accessory switch is ignored.
Power LED	RED ON = Power ON

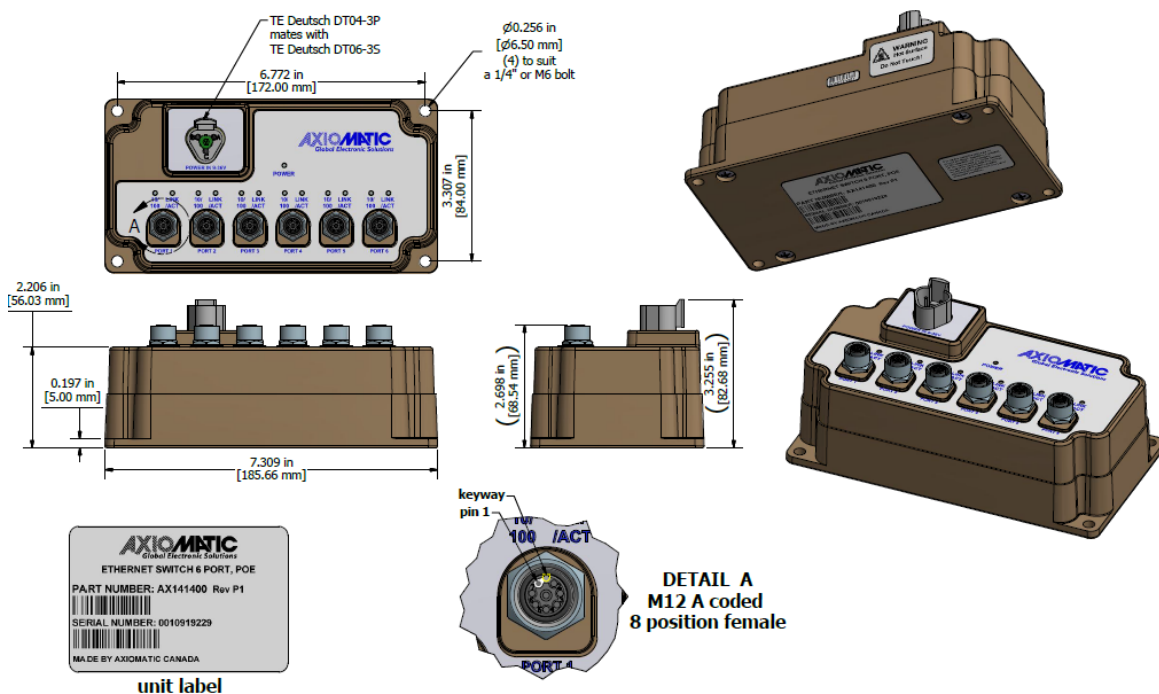
Output Specifications

Power	Power output is available from Ports 2 and 3. 9...36Vdc (Vps) 1A current maximum 48V 0.35A available at Ports 1, 4, 5, and 6.
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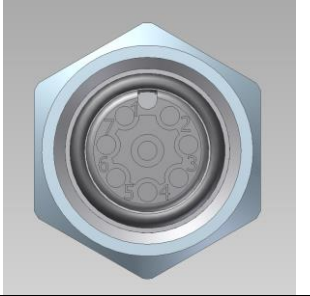
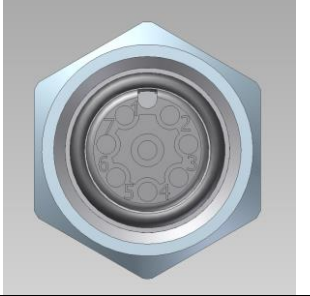
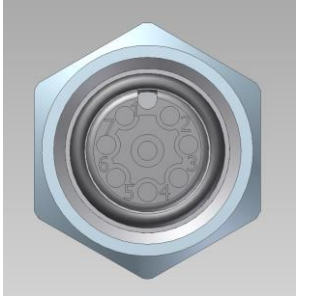
Communications

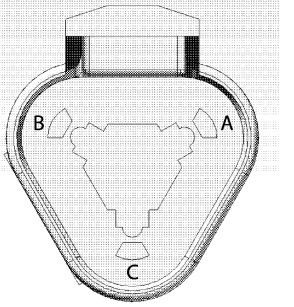
Ethernet	6 ports (Ethernet 802.3, 802.3u, 802.3x) 10/100 Mbit Ethernet compliant Auto-MDIX LAN 10/100 Base-T Up to 100m transmission distance 10 or 100 Mbps transmission speed
LEDs	2 per port GREEN LINK/ACT: ON means connection (LINK) Flashing means activity (ACT) Transmission Speed: 100 Mbit/s = ON 10 Mbit/s = OFF

Dimensional Drawing



General Specifications

Quiescent Current Draw	85 mA @ 24Vdc																																																							
Operating Conditions	-40 to 65 °C (-40 to 149 °F)																																																							
Weight	2.75 lb. (1.247 kg)																																																							
Protection	IP66																																																							
Compliance	RoHS Directive																																																							
Vibration	Random Vibration: 6.86 Grms peak Sinusoidal Component: 8.9 G peak																																																							
Shock	50 G half sine pulse, 6 x 6-20ms																																																							
Atmospheric	Tested from 571.6 hPA to 1437.5 hPA @ 30 °C and 40% Humidity (Simulates -3048 m below sea level to +4572 m above sea level)																																																							
Enclosure and Dimensions	See dimensional drawing. Cast aluminum, anodized.																																																							
Installation	The device can withstand load dump voltage fluctuations.																																																							
Electrical Connections – Ports 1-6	<p>6 CONEC M12 8-pin connectors (A-coded), P/N: 43-01332 (Connectors 1-6)</p> <p>Port 1: Power In, Ethernet 1 (48V 0.35A Out)</p> <table border="1"> <thead> <tr> <th>PIN#</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>48V OUT</td></tr> <tr><td>2</td><td>48V GND</td></tr> <tr><td>3</td><td>48V GND</td></tr> <tr><td>4</td><td>TX-</td></tr> <tr><td>5</td><td>RX+</td></tr> <tr><td>6</td><td>TX+</td></tr> <tr><td>7</td><td>48V OUT</td></tr> <tr><td>8</td><td>RX-</td></tr> </tbody> </table>  <p>Port 2: Power Out, Ethernet 2 Port 3: Power Out, Ethernet 3</p> <table border="1"> <thead> <tr> <th>PIN#</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>Power OUT</td></tr> <tr><td>2</td><td>Power GND</td></tr> <tr><td>3</td><td>Power GND</td></tr> <tr><td>4</td><td>TX-</td></tr> <tr><td>5</td><td>RX+</td></tr> <tr><td>6</td><td>TX+</td></tr> <tr><td>7</td><td>Power OUT</td></tr> <tr><td>8</td><td>RX-</td></tr> </tbody> </table>  <p>Port 4: Ethernet 4, 48V 0.35A Out Port 5: Ethernet 5, 48V 0.35A Out Port 6: Ethernet 6, 48V 0.35A Out</p> <table border="1"> <thead> <tr> <th>PIN#</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>48V OUT</td></tr> <tr><td>2</td><td>48V GND</td></tr> <tr><td>3</td><td>48V GND</td></tr> <tr><td>4</td><td>TX-</td></tr> <tr><td>5</td><td>RX+</td></tr> <tr><td>6</td><td>TX+</td></tr> <tr><td>7</td><td>48V OUT</td></tr> <tr><td>8</td><td>RX-</td></tr> </tbody> </table> 		PIN#	Description	1	48V OUT	2	48V GND	3	48V GND	4	TX-	5	RX+	6	TX+	7	48V OUT	8	RX-	PIN#	Description	1	Power OUT	2	Power GND	3	Power GND	4	TX-	5	RX+	6	TX+	7	Power OUT	8	RX-	PIN#	Description	1	48V OUT	2	48V GND	3	48V GND	4	TX-	5	RX+	6	TX+	7	48V OUT	8	RX-
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Electrical Connection – Port 7	1 DT04-3P connector (Connector 7)	
Port 7: Power In		
PIN#	Description	
A	Power IN	
B	GND	
C	Accessory Switch IN	

Form: TDAX141400-06/28/23